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(54) **SYSTEMS AND METHODS FOR PREDICTING LOWER BODY POSES**

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(57) **ABSTRACT**

A computing system may receive sensor data from one or more sensors coupled to a user. Based on this sensor data, the computing system may generate an upper body pose that corresponds to a first portion of a body of the user, which may comprise a head and an arm of the user. The computing system may process the upper body pose of the user using a machine learning model to generate a lower body pose that corresponds to a second portion of the body of the user, which may comprise a leg of the user. The computing system may generate a full body pose of the user based on the upper body pose and the lower body pose.